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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO	
09 407,402	09 28 1999	SRIDARAN NATESN	346E.US	2707	
75	90 01 23 2002				
DAVID L BERSTEIN ARIAD PHARMACEUTICALS INC 26 LANDSDOWE STREET			EXAMINER SHUKLA, RAM R		
			1632		

DATE MAILED: 01/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)					
		09/407,402		NATESN ET AL.					
	Office Action Summary	Examiner		Art Unit					
		Ram Shukla		1632					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
THE N - Exter after: - If the - If NO - Failui - Any re	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, howev within the statutory minin will apply and will expire SI cause the application to b	er, may a reply be tim num of thirty (30) days X (6) MONTHS from t become ABANDONED	ely filed will be considered timel he mailing date of this co	y. ommunication.				
1)	Responsive to communication(s) filed on 21 f	November 2001 .							
2a) <u></u> □	This action is <b>FINAL</b> . 2b) Th	is action is non-fin	al.						
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)	☑ Claim(s) <u>1-67</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.									
6) Claim(s) is/are rejected.									
7)	7) Claim(s) is/are objected to.								
8) Claim(s) 1-67 are subject to restriction and/or election requirement.									
Application Papers									
9)☐ The specification is objected to by the Examiner.									
10) $\boxtimes$ The drawing(s) filed on <u>28 September 1999</u> is/are: a) $\square$ accepted or b) $\boxtimes$ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11) The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12) The oath or declaration is objected to by the Examiner.									
Priority under 35 U.S.C. §§ 119 and 120									
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)	☐ All b)☐ Some * c)☐ None of:								
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).									
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.									
Attachmen									
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5)		(PTO-413) Paper No Patent Application (PT ion					



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## **DETAILED ACTION**

1. Applicants response filed 11-23-01 has been received and entered.

2. Applicants election of claims of the invention of group II (Claims 1-42, 44-48, 57-59, and 65-67) is acknowledged. However, applicants have requested a new restriction. Accordingly, keeping in view customer service, a new restriction has been set up as discussed below.

- Claims 1-38, drawn to recombinant nucleic acids and vectors, viruses and compositions comprising them, classified in class 536, subclass 23.1.
- II. Claims 39-51, drawn to methods of producing genetically engineering cells and cells produced therein, classified in class 435, subclass 455.
- III. Claims 52-55, 62, and 63, drawn to organisms comprising genetically engineered cells and uses thereof, classified in class 800, subclass 23.1.
- IV. Claims 60 and 61, drawn to a method of using genetically engineered cells for stimulating transcription of a target gene, classified in class 435, subclass 375.
- V. Claims 56-59 and 64-67, drawn to a method of rendering a host organism capable of regulated gene expression, the host organism produced therein and use of the host organism for stimulating transcription of a target gene, classified in class 424, subclass 9.1.
- 3. The embodiments recited in claims 1-38 are common to the inventions of the groups II-V. Should any of these groups be elected, claims 1-38 would be examined to the extent they read on the elected invention.
- 4. Inventions of groups I, II, and V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with



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another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the nucleic acids of group I encode chimeric transcription factors, and these the nucleic acids could be used in the several materially different methods, for example, the method of group II, that is for producing genetically engineered cells or for the method of rendering organisms capable of regulated expression of a target gene. The methods of the groups II and V are distinct because the method of group II is practiced in a cell whereas the method of group V is practiced in an organism and therefore, their steps would be distinct.

Inventions of the groups II, III and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the genetically engineered cells of group II can be used for stimulating expression of a gene in vitro by treating the cells with a ligand (the method of group III) or for producing host organisms (the method of group IV). The steps of the two groups would be different from each other and the steps used in one method could not be used in the other.

Inventions of the groups II, IV, and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to different methods that have distinct steps.

- 5. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art shown by their different classification and their recognized divergent subject matter, and because each invention requires a separate, non-coextensive search, restriction for examination purposes as indicated is proper.
- 6. This application contains claims directed to the following patentably distinct species of the claimed invention:



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a transcription potentiation domain, a DNA binding domain, tetR repressor domain, and a stabilization domain.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable, noted in the previous office action of 5-22-01. Currently, claim 1-5 reciting a recombinant nucleic acid encoding a transcription factor comprising a p65 domain and a ligand binding domain is generic.

Applicants have argued that the fact that the elements have acquired a separate state in the art, and require a separate search in not relevant to restriction practice is not relevant to restriction practice is not persuasive. According to MPEP, there are two criteria for a proper requirement for restriction between patentably distinct inventions: (A) the inventions must be independent (see MPEP 803).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicants are advised to submit a clean version of each amended claim (without underlining and bracketing) according to § 1.121(c) and a copy of all the pending/under consideration claims. For instructions, Applicants are referred to http://www.uspto.gov/web/offices/dcom/olia/aipa/index.htm.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram R. Shukla whose telephone number is (703) 305-1677. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Clark, can be reached on (703) 305-4051. The fax phone number for this Group is (703) 308-4242. Any inquiry of

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a general nature, formal matters or relating to the status of this application or proceeding should be directed to the Kay Pinkney whose telephone number is (703) 305-3553.

Ram R. Shukla, Ph.D.